

## AMENDMENTS

### In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A position sensor for an electronic device, comprising:
  - a housing;
  - a first conductor disposed at the bottom of the housing;
  - a plurality of second conductors engaged in the housing; and
  - a connector movably disposed in the housing and comprising a plurality of convexes on a bottom thereof to contact the first conductor and reduce friction therebetween  
~~contacting the first conductor;~~wherein the inner periphery of the housing limits the movement of the connector so that the first conductor electrically connects to only one of the second conductors.
2. (original) The position sensor as claimed in claim 1, wherein the periphery of the housing comprises a plurality of engaging portions for engaging the second conductors thereof.
3. (original) The position sensor as claimed in claim 2, wherein the connector comprises a plurality of protrusions corresponding to the engaging portions for contacting the second conductors.

4. (original) The position sensor as claimed in claim 3, wherein the connector contacts each of the second conductors with the protrusions by moving in the housing.

5. (canceled)

6. (original) The position sensor as claimed in claim 1, wherein the first conductor is a metal sheet.

7. (original) The position sensor as claimed in claim 1, wherein the housing is made of plastic.

8. (original) The position sensor as claimed in claim 1, wherein the first conductor is made of non-ferric metal.

9. (currently amended) The position sensor as claimed in claim 1, wherein the second conductors ~~is~~ are made of ferric metal.

10. (original) The position sensor as claimed in claim 1, wherein the connector is made of ferromagnetic metal to ensure contact between the second conductor and the connector.

11. (original) The position sensor as claimed in claim 1, wherein the second conductors are resistors of different values.

12. (original) The position sensor as claimed in claim 1, wherein the second conductors are signal sources sending different signals.

13. (currently amended) An electronic device with position detection, comprising:

a circuit board;

a housing comprising a plurality of engaging portions on the periphery thereof;

a first conductive element disposed between the housing and the circuit board;

a plurality of second conductive elements disposed on the circuit board with one end

thereof and engaging the engaging portion with the other end; and

a connector movably disposed in the housing and comprising a plurality of convexes on

the bottom thereof to contact the first conductive element and reduce friction

therebetween ~~contacting the first conductive element~~;

wherein the inner periphery of the housing limits the movement of the connector so that the first conductive element electrically connects to only one of the second conductive elements, and thus the position of the electronic device is detected.

14. (currently amended) The electronic device with position detection as claimed in claim 13, wherein the connector comprises a plurality of protrusions corresponding to the engaging portions for contacting the second conductive elements.

15. (currently amended) The electronic device with position detection as claimed in claim 14, wherein the connector contacts each of the second conductive elements with the protrusions by moving in the housing.

16. (canceled)

17. (new) A position sensor for an electronic device, comprising:

a housing comprising a plurality of engaging portions on the periphery thereof for

engaging the second conductors thereof;

a first conductor disposed at the bottom of the housing;

a plurality of second conductors engaged in the housing; and

a connector movably disposed in the housing and contacting the first conductor, and

comprising a plurality of protrusions corresponding to and capable of inserting

into the engaging portions for contacting the second conductors;

wherein the inner periphery of the housing limits the movement of the connector so that the first conductor electrically connects to only one of the second conductors.

18. (new) A position sensor for an electronic device, comprising:

a housing;

a first conductor disposed at the bottom of the housing;

a plurality of second conductors engaged in the housing; and

a connector movably disposed in the housing and contacting the first conductor;

wherein the shape of the connector is similar to the inner periphery of the housing and the inner periphery of the housing limits the movement of the connector so that the first conductor electrically connects to only one of the second conductors.